Ostfalia
University of
Applied Sciences

- Computer Science Faculty -

International Lectures*

12 December – 14 December 2016

Prototyping social robots

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With the advances in artificial intelligence, computing, and mechatronics, robots are becoming capable of playing the role of social actors, capable of interacting with humans. Such robots can entertain, help with difficult and mundane tasks, or support disabled persons. However, as in any social interaction, it has to "click" and this set of lectures will explain how we can prototype human-robot interactions to find robot designs and behaviors that suit user's needs.

We will use tools like Arduino and Processing, as well as Artificial Intelligence APIs, available from Google, Amazon and IBM to rapidly prototype programs capable of interacting with humans.

As creating social robot is not only the hardware and software setup but overall creating a socially desirable situation for the users', lectures will explain how robot designers approach the problem of understanding the users, finding their needs and creating engaging scenarios. For that designers use user-observations, storyboarding, video prototyping and wizard-of-oz methods.

Participants in the lectures will learn how to use a number of tools to prototype socially attractive designs, a skillset that can be useful also for creating Smartphone and Web Apps or Internet-of-Things devices.

Starting Monday, December 12th, 09:00, Room 136 ('Kaminzimmer')

Ein Semester in ...

Informationsveranstaltung zum Informatik-Auslandssemester

Wednesday, December 14th, 12:00, Room 136 ('Kaminzimmer')

* Internationale Vorlesungen - können als Wahlpflichtvorlesungen mit 2 SWS bzw. 2,5 Credits anerkannt werden.

Prof. Reinhard Gerndt, 2016